



#5

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/596,141

Source: BATCH

Date Processed by STIC: 11/16/2000

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin30help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

1646

RAW SEQUENCE LISTING DATE: 11/16/2000
 PATENT APPLICATION: US/09/596,141 TIME: 16:24:35

Input Set : A:\CVT 203.txt
 Output Set: N:\CRF3\11162000\I596141.raw

Does Not Comply
 Corrected Diskette Needed

5 <110> APPLICANT: Lawn, Richard M.
 7 Wade, David
 9 Garvin, Michael
 13 <120> TITLE OF INVENTION: Compositions and Methods for Increasing Cholesterol
 15 Efflux and Raising HDL using ATP Binding Cassette
 17 Transporter Protein ABC1
 21 <130> FILE REFERENCE: 99,395-B
 25 <140> CURRENT APPLICATION NUMBER: US/09/596,141
 27 <141> CURRENT FILING DATE: 2000-06-16
 31 <150> PRIOR APPLICATION NUMBER: US 60/140,264
 33 <151> PRIOR FILING DATE: 1999-06-18
 37 <150> PRIOR APPLICATION NUMBER: US 60/153,872
 39 <151> PRIOR FILING DATE: 1999-08-14
 43 <150> PRIOR APPLICATION NUMBER: US 60/166,573
 45 <151> PRIOR FILING DATE: 1999-11-19
 49 <160> NUMBER OF SEQ ID NOS: 57
 53 <170> SOFTWARE: PatentIn Ver. 2.0
 57 <210> SEQ ID NO: 1
 59 <211> LENGTH: 10442
 61 <212> TYPE: DNA
 63 <213> ORGANISM: Homo sapiens
 67 <400> SEQUENCE: 1
 69 ggccgggacc cgacagaccg agccgaccct tctctcccgg gctgcccag gccaggcgcg 60
 71 ggagctccgc gcaccaacag agccgggtct cagggcgctt tgcctctgt ttttcccgc 120
 73 gttctgtttt ctccccttct ccggaaggct tgtcaagggg taggagaaag agacgcaaac 180
 75 acaaaaagtgg aaaacagtta atgaccagcc acggggcgctc ctgctgtgag ctctggccgc 240
 77 tgccttccag ggctcccag ccacacgctg ggcgtgctgg ctgagggaac atggcttgtt 300
 79 ggctcagct gaggttgcgt ctgtggaaga acctcacttt cagaagaaga caaacatgtc 360
 81 agctgttact ggaagtggcc tggcctctat ttatcttctt gatcctgac tctgttcggc 420
 83 tgagctaccc acctatgaa caacatgaat gccattttcc aaataaagcc atgccctctg 480
 85 caggaacact tcttggggtt caggggatta tctgtaatgc caacaacccc tgtttccggt 540
 87 acccgactcc tggggaggct ccgggagttg ttggaaactt taacaaatcc attgtggctc 600
 89 gcctgttctc agatgctcgg aggttctttt tatacagcca gaaagacacc agcatgaagg 660
 91 acatgcgcaa agttctgaga acattacagc agatcaagaa atccagctca aacttgagc 720
 93 ttcaagattt cctggtggac aatgaaacct tctctgggtt cctatatcac aacctctctc 780
 95 tcccaaatgc tactgtggac aagatgctga gggctgatgt cattctccac aaggatattt 840
 97 tgcaaggcta ccagttacat ttgacaagtc tgtgcaatg atcaaaatca gaagagatga 900
 99 ttcaacttgg tgaccaagaa gtttctgagc tttgtggcct accaaaggag aaactggctg 960
 101 cagcagagcg agtacttctg tccaacatgg acatcctgaa gccaatcctg agaacactaa 1020
 103 actctacatc tcccttcccg agcaaggagc tggctgaagc cacaaaaaca ttgctgcata 1080
 105 gtcttgggac tctggcccag gagctgttca gcatgagaag ctggagtgac atgcccagc 1140
 107 aggtgatgtt tctgaccaat gtgaacagct ccagctctct cacccaaatc taccaggctg 1200
 109 tgtctcgtat tgtctgcggg catcccagg gaggggggct gaagatcaag tctctcaact 1260
 111 ggtatgagga caacaactac aaagccctct ttggaggcaa tggcactgag gaagatgctg 1320
 113 aaaccttcta tgacaactct acaactcctt actgcaatga tttgatgaag aatttggagt 1380
 115 ctatgctctt tcccgcatt atctggaaag ctctgaagcc gctgctcgtt gggaagatcc 1440
 117 tgtatacacc tgacactcca gccacaaggc aggtcatggc tgaggtgaac aagaccttcc 1500

4-5

RAW SEQUENCE LISTING

DATE: 11/16/2000

PATENT APPLICATION: US/09/596,141

TIME: 16:24:35

Input Set : A:\CVT 203.txt

Output Set: N:\CRF3\11162000\I596141.raw

```

119 aggaactggc tgtgttccat gatctggaag gcatgtggga ggaactcagc cccaagatct 1560
121 ggaccttcat ggagaacagc caagaaatgg accttgccg gatgctgttg gacagcaggg 1620
123 acaatgacca cttttgggaa cagcagtttg atggcttaga ttggacagcc caagacatcg 1680
125 tggcgttttt ggccaagcac ccagaggatg tccagtcacg taatggttct gtgtacacct 1740
127 ggagagaagc tttcaacgag actaacccag caatccggac catatctcgc ttcattggagt 1800
129 gtgtcaacct gaacaagcta gaacccatag caacagaagt ctggctcacc aacaagtcca 1860
131 tggagctgct gcatgagagg aagttctggg ctggtattgt gttaactgga attactccag 1920
133 gcagcattga gctgccccat catgtcaagt acaagatccg aatggacatt gacaatgttg 1980
135 agagggacaaa taaaatcaag gatgggtact gggacctcgg tccctgagct gacctcttg 2040
137 aggacatgcg gtacgtcttg gggggcttcg cctacttgca ggatgtggtg gagcaggcaa 2100
139 tcatcagggc gctgacgggc accgagaaga aaactggtgt ctatatgcaa cagatgccct 2160
141 atccctgtta cgttgatgac atctttctgc ggggtgatga ccggtcaatg cccctcttca 2220
143 ctgtgctggc ctggatttac tcagtggctg tgatcatcaa gggcatcgtg tatgagaagg 2280
145 aggcacgycg gaagagagac atgcggtaca tgggcttgya caacagcata ctctggttta 2340
147 gctggttcat tagtagcctc attcctcttc ttgtgagcgc tggcctgcta gtggtcatcc 2400
149 tgaagttagg aaacctgctg cctacagtg atccacgct ggtgtttgtc ttcctgtccg 2460
151 tgtttgctgt ggtgacaatc ctgcagtctc tctgattag cacactcttc tccagagcca 2520
153 acctggcagc agcctgtggg ggcacatctc actcaacgct gtacctgcc taccgtctgt 2580
155 gtgtggcatg gcaggactac gtgggcttca cactcaagat cttecgctagc ctgctgtctc 2640
157 ctgtggcttt tgggtttggc ttgagtagct ttgccctttt tgaggagcag ggcattggag 2700
159 tgcagtggya caacctgttt gagagtcctg tggaggaaga tggcttcaat ctaccactt 2760
161 cgatclccat gatgctgttt gacaccttcc tctatggggt gatgacctg tacattgagg 2820
163 ctgtctttcc aggccagtac ggaattccca ggccttgta ttttcttgc accaagtcc 2880
165 actggttttg cgaggaaagt gatgagaaga gccacctgg ttccaaccag aagagaatgt 2940
167 cagaaatctg catggaagg gaacccaccc acttgaagct gggcgtgtcc attcagaacc 3000
169 tggtaaaagt ctaccgagat gggatgaagg tggctgtcga tggcctggca ctgaattttt 3060
171 atgagggcca gatcacctcc ttccctgggc acaatggagc ggggaagacg accaccatgt 3120
173 caatctgac cgggttgttc cccccgacct cgggcaccgc ctacatcctg ggaagagaca 3180
175 ttccgtctga gatgagcacc atccggcaga acctgggggt ctgtccccag cataacgtgc 3240
177 tgtttgacat gctgactgtc gaagaacaca tctggttcta tggcctgtg aaagggtct 3300
179 ctgagaagca cgtgaaggcg gagatggagc agatggccct gcatgttgtt ttgcatcaa 3360
181 gcaagctgaa aagcaaaaca agccagctgt caggtggaat gcagagaaaq ctatctgttg 3420
183 ccttggcctt tgtcggggga tctaagggtt tctttctgga tgaaccaca gctggtgttg 3480
185 acctttactc ccgcaaggga atatgggagc tgcgtctgaa ataccgacaa ggcgcacca 3540
187 ttattctctc tacacaccac atggatgaag cggacgtcct gggggacagg attgccatca 3600
189 tctcccatgg gaagctgtgc tgtgtgggt cctccctgtt tctgaagaac cagctgggaa 3660
191 caggctacta cctgaccttg gtcaagaaag atgtggaatc ctccctcagt tctgcagaa 3720
193 acagtgttag cactgtgtca tacctgaaaa aggaggacag tgtttctcag agcagttctg 3780
195 atgctggcct gggcagcgac catgagagtg acacgctgac catcgatgtc tctgctatct 3840
197 ccaacctcat caggaagcat gtgtctgaag cccggctggg ggaagacata gggcatgagc 3900
199 tgacctatgt gctgccatat gaagctgcta aggagggagc ctttgtggaa ctctttcatg 3960
201 agattgatga ccggctctca gacctgggca tttctagtta tggcatctca gagacgaccc 4020
203 tggagaagaa attcctcaag gtggccgaag agagtggggt gcatgctgag acctcagatg 4080
205 gtaccttgcc agcaagacga aacaggcggg ccttcgggga caagcagagc tgtcttcgcc 4140
207 cgttcaactga agatgatgct gctgatccaa atgattctga catagacca gaatccagag 4200
209 agacagactt gctcagtggt atggatggca aagggtccta ccaggtgaaa ggcgtgaaac 4260
211 ttacacagca acagtttgtg gcccttttgt ggaagagact gctaattgcc agacggagtc 4320
213 ggaaggattt ttttgcctag attgtcttgc cagctgtgtt tgtctgcatt gcccttgtgt 4380
215 tcaagctgat cgtgccaccc ttltggcaagt accccagcct ggaacttcag cctgygatgt 4440

```

RAW SEQUENCE LISTING

DATE: 11/16/2000

PATENT APPLICATION: US/09/596,141

TIME: 16:24:35

Input Set : A:\CVT 203.txt

Output Set: N:\CRF3\11162000\I596141.raw

```

217 acaacgaaca gtacacattt gtcagcaatg atgctcctga ggacacggga accctggaac 4500
219 tcttaaacgc cctcaccaaa gacccctggc tcgggaccgg ctgtatggaa ggaacccaa 4560
221 tcccagacac gccctgccag gcaggggagc aagagtggac cactgcccc gttccccaga 4620
223 ccatcatgga cctctccagc aatgggaact ggacaatgca gaaccttca cctgcattgc 4680
225 agtgtagcag cgaacaaatc aagaagatgc tgcctgtgtg tccccaggg gcaggggggc 4740
227 tgcctcctcc acaaaagaaa caaacacact cagatatact tcaggacctg acaggaagaa 4800
229 acatttcgga ttatctggty aagacgtatg tcagatcat agccaaaagc ttaaagaaca 4860
231 agatctgggt gaattgagtt aggtatggcg qcttttcctt ggggtgcagt aatactcaag 4920
233 ctgctcctcc gagtcaagaa gttaatgatc ccatacaaca aatgaagaaa cactaaagc 4980
235 tggccaagga cagttctgca gatcgatttc tcaacagctt gggaagattt atgacaggac 5040
237 tggacaccag aataatgtc aaggtgtggt tcaatacaaa gggctgcat gcaatcagct 5100
239 ctttctgaa tgctatcaac aatgccattc tccgggcca cctgcacaa ggagagaacc 5160
241 ctgaccatta tggaaattact gctttcaatc atccccgaa tctcaccag cagcagctct 5220
243 cagaggtggc tctgatgacc acatcagtggt atgtccttgt gtcctctgt gtcattcttg 5280
245 caatgtcctt cgtccagcgc agctttgtcg tatctctgat ccaggagcgg gtcagcaaac 5340
247 caaacacact ccagttcatt agtggagtgga agcctgtcat ctactggctc tctaattttg 5400
249 tctgggatat gtgcaattac gttgtccctg ccacactggt cattatcatt ttcattctgt 5460
251 tccagcagaa gtccatgtg tctccacca atctgcctgt gctagccctt ctacttttgc 5520
253 tgtatgggtg gtcaatcaca cctctcatgt acccagcttc ctttgtgttc aagatcccca 5580
255 gcacagccta tgtgtgtctc accagcgtga acctcttcat tggcattaat ggcagcgtgg 5640
257 ccacctttgt gctggagctg ttccaccaga ataaagctgaa taatatcaat gatctcctga 5700
259 agtccgtgtt cttgatcttc ccacattttt gccctgggagc agggctcatt gacatggtga 5760
261 aaaaccaggc aatggctgat gccctggaaa ggtttgggga gaatcgcttt ggttcacct 5820
263 tatcttggga cttgttggga cgaacctctc tcgccatggc cgtggaagg gttgtgttct 5880
265 tctcatttac tgttctgac cagtacagat tcttcattca gccacagact gtaaatgcaa 5940
267 agctatctcc tctgaatgat gaagatgaag atgtgaggcg ggaagacag agaattcttg 6000
269 atggtggagg ccagaatgac atcttagaaa tcaaggagtt gacgaagata tatagaagga 6060
271 agcggagacc tctgttgatc aggatttgcg tgggcattcc tctgtgtgag tgccttgggc 6120
273 tcttgagggt taatggggct ggaaaatcat caactttcaa gatgttaaca ggagatacca 6180
275 ctgttaccag agggatgctt tctcttaaca aaaatagtat ctatcaaac atccatgaag 6240
277 tacatcagaa catgggctac tgcctcagc ttgatgccat cacagagctg ttgactggga 6300
279 gagaacagct ggagttcttt gcccttttga gaggagctcc agagaaagaa gttggcaagg 6360
281 ttggtgagtg ggcgattcgg aaactgggccc tctggaagta tggagaaaaa tatgctggtg 6420
283 actatagtg aggcacacaa cgcaagctct ctacagccat ggccttgatc ggcgggctct 6480
285 ctgtggtgtt tctggatgaa ccaccacag gcattggatcc caaagcccg cggttcttct 6540
287 ggaattgtgc cctaagtgtt gtcaaggagg ggagatcagt agtgcctaca tctcatagta 6600
289 tggaaagaatg tgaagctctt tgcactagga tggcaatcat ggtcaatgga aggttcaggt 6660
291 gccttggcag tgtccagcat ctaaaaaata ggtttggaga tggttatata atagttgtac 6720
293 gaatagcagg gtccaccccg gacctgaagc ctgtccagga ttcttttga cttgcatttc 6780
295 ctggaagtgt tctaaaagag aaacaccgga acatgctaca ataccagctt ccattctcat 6840
297 tatcttctct ggcaggata ttcagcatcc tctcccagag caaaaagcga ctccacatag 6900
299 aagactactc tgtttctcag acaacacttg accaagtatt tgtgaacttt gccaaaggac 6960
301 aaagtgatga tgaccactta aaagacctct cattacacaa aaaccagaca gtagtggacg 7020
303 ttgcagttct cactcttttt ctacaggatg agaaagtga agaaagctat gtatgaagaa 7080
305 tctgttctat acygggtggc tgaagtataa gaggaactag actttccttt gcaccatgtg 7140
307 aagtgttgtg gaaaaagag ccagaagtgt atgtgggaag aagtaaacct gatactgtac 7200
309 tgatactatt caatgcaatg caattcaatg caatgaaaac aaaattccat tacaggggca 7260
311 gtgcctttgt agcctatgtc ttgtatggct ctcaagtga agacttgaat ttagtttttt 7320
313 acctatacct atgtgaaact ctattatgga acccaatgga catatgggtt tgaactaca 7380

```

RAW SEQUENCE LISTING

DATE: 11/16/2000

PATENT APPLICATION: US/09/596,141

TIME: 16:24:35

Input Set : A:\CVT 203.txt

Output Set: N:\CRF3\11162000\I596141.raw

```

315 cttttttttt ttttttgttc ctgtgtatcc tcatttgggg tgcaacaata attcatcaag 7440
317 taatcatggc cagcgattat tgatcaaaat caaaaggtaa tgcacatcct cattcactaa 7500
319 gccatgccat gccagggaga ctgggtttccc ggtgacacat ccatttgcctg caatgaqgtg 7560
321 gccagagtta ttagtgccaa gtttttcaga aagtttgaag caccatgggtg tgcattgctc 7620
323 acttttgtga aagctgctct gctcagagtc tatcaacatt gaatatcagt tgacagaatg 7680
325 gtgccatgcy tggctaacal cctgctttga tccctctga taagctgttc tgggtggcagt 7740
327 aacatgcaac aaaaatgttg gtgtctctag gcacgggaaa cttggttcca ttgttatatt 7800
329 gtccatgtct tcgagccatg ggtctacagg gtcaccccta tgagactctt aaatatcctt 7860
331 agatcctggt aagagcaaaa gaatcaacag ccaaaactgt ggggctgcaa gctgctgaag 7920
333 ccagggcatg ggattaaaga gattgtgcgt tcaaacctag ggaagcctgt gccatttgt 7980
335 cctgactgtc tcttaacatg gtacactgca tctcaagatg tttatctgac acaagtgtat 8040
337 tattttctgg tttttgaatt aatctagaaa atgaaaagat ggagttgtat tttgacaaaa 8100
339 atgtttgtat tttttaatgt tttttgaat ttaagtctt atcagtgaat tctgaatcct 8160
341 tagaatggcc tctttgtaga accctgtggt atagaggagt atggccactg cccactatt 8220
343 tttattttct tatgtaatgt tgcatacag tcattgactag tgcctagaaa gcaatgtgat 8280
345 ggtcaggatc tcattgacatt atatttgaat ttctttcaga tcatttagga tactcttaat 8340
347 ctcaacttcat caatcaaaaa ttttttgaat gtatgtgtga gctgaaagag tatgtacgta 8400
349 cgtataagac taagagagata ttaagtctca gtacacttcc tctgacctgt tatcagctc 8460
351 actggtttac aaatataggt tgtcttctgg ttgtaggagc cactgttaac aatattgggc 8520
353 agcctttttt tttttttttt aattgcaaca atgcaaaagc caagaaagta taagggtcac 8580
355 aagtttaaac aatgaattct tcaacagggg aaacagctag cttgaaaact tgcgaaaaa 8640
357 cacaacttgt gtttatggca ttttagtacct tcaaaaat tggctttgcag atattggata 8700
359 ccccatataa tctgacagtc tcaaattttt catctcttca atcactagt aagaaaaata 8760
361 taaaaacaac aaatacttcc atatggagca tttttcagag ttttctaacc cagtcttatt 8820
363 tttctagtca qtaaacattt qtaaaaaaac tgtttoaacta atacttaact ttaactgtct 8880
365 tgagagaaaa gaaaaatatg agagaactat tgtttgggga agttcaagt atctttcaat 8940
367 atcattacta acttcttcca ctttttccaa aatttgaata ttaacgctaa aggtgtaaga 9000
369 ctccagattt caaattaatc tttctatatt ttttaattt acagaatatt atataacca 9060
371 ctgctgaaaa agaaaaaaat gattgtttta gaagttaaag tcaatattga ttttaatat 9120
373 aagtaaatga ggcataattc caataactag tgatatggca tctgttgaat ttacagtatc 9180
375 ttcaaaaata cagaatttat agaataatt ctctcatatt aatattttt aaaaatcaag 9240
377 ttatggtttc ctoattttac taaaatcgta ttctaattct tcattatagt aaatctatga 9300
379 gcaactcctt acttcgggtc ctctgatttc aagccatatt ttaaaaaat caaaaggcac 9360
381 tgtgaactat ttgaaagaaa acacgacatt ttaatacaga ttgaaaggac ctcttctgaa 9420
383 gctagaaaaa atctatagtt atacatcttc attaatactg tgttaccttt taaaatagta 9480
385 attttttaca ttttctgtg taaacctaat tgtggtagaa atttttacca actctatact 9540
387 caatcaagca aaatttctgt atatttctctg tggaaatgtac ctatgtgagt ttcagaaatt 9600
389 ctcaaaaata gtyttcaaaa atttctgctt ttgcatcttt gggacacctc agaaaaactta 9660
391 ttaacaactg tgaatatgag aaatacagaa gaaaaataa agccctctat acataaatgc 9720
393 ccagcacaat tcattgttaa aaaaacaaca aacctcacac tactgtattt cattatctgt 9780
395 actgaaagca aatgctttgt gactattaaa tgttgacat catttattca ctgtatagta 9840
W--> 397 atcattgact aaagccattt gctgtgtttt cttcttggg tggatatat caggtaaaat 9900
399 attttccaaa gagccatgtg tcatgtaata ctgaacctt tgaattgag acatttaatt 9960
W--> 401 ggacccttgg tattatctac tagaataatg taatactgaa gaaatattgc tctaattctt 10020
W--> 403 tcaaaatggg gcattcccc taaaaattc tatttccaa aggattttagc ttgcttatcc 10080
405 cttcttatcc cctaagatga agctgttttt gtgctctttg ttcacattg gccctcatc 10140
407 caagcacctt acgctgtctg taatgggalc tatttttgca ctggaaatc tgagaattgc 10200
409 aaaactagac aaaagtcca caacagattt ctaagttaaa tcattttcat taaaaggaaa 10260
411 aaagaaaaaa aattttgtal gtaataact ttatatgaag tattaaaaat catatttcta 10320

```

See item 100m
Eva Summary
sheet

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/596,141
 DATE: 11/16/2000
 TIME: 16:24:35

Input Set : A:\CVT 203.txt
 Output Set: N:\CRF3\11162000\I596141.raw

```

413 tggttgtaata taatgagtc aaaaataaag ctgtgacagt tctgttataa aaaaaaaaaa 10380
415 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 10440
417 aa 10442
420 <210> SEQ ID NO: 2
422 <211> LENGTH: 2261
424 <212> TYPE: PRT
426 <213> ORGANSIM: Homo sapiens
430 <400> SEQUENCE: 2
432 Met Ala Cys Trp Pro Gln Leu Arg Leu Leu Leu Trp Lys Asn Leu Thr
434 1 5 10 15
438 Phe Arg Arg Arg Gln Thr Cys Gln Leu Leu Leu Glu Val Ala Trp Pro
440 20 25 30
444 Leu Phe Ile Phe Leu Ile Leu Ile Ser Val Arg Leu Ser Tyr Pro Pro
446 35 40 45
450 Tyr Glu Gln His Glu Cys His Phe Pro Asn Lys Ala Met Pro Ser Ala
452 50 55 60
456 Gly Thr Leu Pro Trp Val Gln Gly Ile Ile Cys Asn Ala Asn Asn Pro
458 65 70 75 80
462 Cys Phe Arg Tyr Pro Thr Pro Gly Glu Ala Pro Gly Val Val Gly Asn
464 85 90 95
468 Phe Asn Lys Ser Ile Val Ala Arg Leu Phe Ser Asp Ala Arg Arg Leu
470 100 105 110
474 Leu Leu Tyr Ser Gln Lys Asp Thr Ser Met Lys Asp Met Arg Lys Val
476 115 120 125
480 Leu Arg Thr Leu Gln Gln Ile Lys Lys Ser Ser Ser Asn Leu Lys Leu
482 130 135 140
486 Gln Asp Phe Leu Val Asp Asn Glu Thr Phe Ser Gly Phe Leu Tyr His
488 145 150 155 160
492 Asn Leu Ser Leu Pro Lys Ser Thr Val Asp Lys Met Leu Arg Ala Asp
494 165 170 175
498 Val Ile Leu His Lys Val Phe Leu Gln Gly Tyr Gln Leu His Leu Thr
500 180 185 190
504 Ser Leu Cys Asn Gly Ser Lys Ser Glu Glu Met Ile Gln Leu Gly Asp
506 195 200 205
510 Gln Glu Val Ser Glu Leu Cys Gly Leu Pro Lys Glu Lys Leu Ala Ala
512 210 215 220
516 Ala Glu Arg Val Leu Arg Ser Asn Met Asp Ile Leu Lys Pro Ile Leu
518 225 230 235 240
522 Arg Thr Leu Asn Ser Thr Ser Pro Phe Pro Ser Lys Glu Leu Ala Glu
524 245 250 255
528 Ala Thr Lys Thr Leu Leu His Ser Leu Gly Thr Leu Ala Gln Glu Leu
530 260 265 270
534 Phe Ser Met Arg Ser Trp Ser Asp Met Arg Gln Glu Val Met Phe Leu
536 275 280 285
540 Thr Asn Val Asn Ser Ser Ser Ser Thr Gln Ile Tyr Gln Ala Val
542 290 295 300
546 Ser Arg Ile Val Cys Gly His Pro Glu Gly Gly Gly Leu Lys Ile Lys
548 305 310 315 320
552 Ser Leu Asn Trp Tyr Glu Asp Asn Asn Tyr Lys Ala Leu Phe Gly Gly

```

fyi:

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

DATE: 11/16/2000

PATENT APPLICATION: US/09/596,141

TIME: 16:24:36

Input Set : A:\CVT 203.txt

Output Set: N:\CRF3\11162000\I596141.raw

L:25 M:270 C: Current Application Number differs, Replaced Application Number
L:27 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:397 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:397 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:1
L:397 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:1
L:397 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:1
L:397 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:1
L:401 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:401 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:1
L:401 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:1
L:401 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:1
M:340 Repeated in SeqNo=1
L:403 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:403 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:1
L:403 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:1
L:403 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:1
L:1366 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:1366 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:4
L:1366 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:4
L:1366 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:4
L:1366 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:4
L:1368 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:1368 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:4
L:1368 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:4
L:1368 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:4
M:340 Repeated in SeqNo=4
L:1370 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:1370 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:4
L:1370 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:4
L:1370 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:4
L:1372 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:1372 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:4
L:1372 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:4
L:1372 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:4
L:1578 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6
L:1578 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6
L:1578 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6
L:1578 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:6
L:1578 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:6
L:1582 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6
L:1582 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6
L:1582 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6
L:1582 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:6
M:340 Repeated in SeqNo=6
L:1584 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6
L:1584 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6
L:1584 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6
L:1584 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:6

VERIFICATION SUMMARY

DATE: 11/16/2000

PATENT APPLICATION: US/09/596,141

TIME: 16:24:36

Input Set : A:\CVT 203.txt

Output Set: N:\CRF3\11162000\I596141.raw

L:1943 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:7
L:1943 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:1943 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:1943 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:7
L:1943 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:7
L:1947 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:7
L:1947 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:1947 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:1947 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:7
M:340 Repeated in SeqNo=7
L:3171 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:9
L:3171 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:9
L:3171 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:9
M:340 Repeated in SeqNo=9

Raw Sequence Listing Error Summary

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/596,141

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 Wrapped Aminos The amino acid number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 Misaligned Amino Acid The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
Numbering between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 Variable Length Sequence(s) contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and
indicate in the (ix) feature section that some may be missing.
- 7 PatentIn ver. 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
sequence(s) . Normally, PatentIn would automatically generate this section from the
previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223>
sections for Artificial or Unknown sequences.
- 8 Skipped Sequences Sequence(s) missing. If intentional, please use the following format for each skipped sequence:
(OLD RULES) (2) INFORMATION FOR SEQ ID NO:X:
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any headings under "SEQUENCE CHARACTERISTICS")
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X:
 This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 Skipped Sequences Sequence(s) missing. If intentional, please use the following format for each skipped sequence.
(NEW RULES) <210> sequence id number
 <400> sequence id number
 000
- 10 Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing.
(NEW RULES) Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 Use of <213> Organism Sequence(s) are missing this mandatory field or its response.
(NEW RULES)
- 12 Use of <220> Feature Sequence(s) are missing the <220> Feature and associated headings.
(NEW RULES) Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13 PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted
file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.